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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,693	02/19/2004	Victor Mercado	1842.043US1	4552

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER	
LAU, HOI CHING	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/782,693	MERCADO ET AL.	
	Examiner	Art Unit	
	Hoi C. Lau	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12,17-21 and 23-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12,17-21 and 23-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/1/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Office acknowledges the change made to the claims by the applicant. The objections of claims 12,13 and 25 have been withdrawn. Likewise, the rejections of claims under 35 U.S.C. 112 have been withdrawn with the explanation in amendment.

Response to Arguments

3. Applicant's arguments with respect to claims 1-12,17-21 and 23-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claim 18 is objected to because of the following informalities:

Claim 18 is depended on a cancel claim 16, which now interpret as a depended claim of 17.

Appropriate correction is required.

5. Claim 24 is objected to because of the following informalities:

The term "peripheral" does not appear in claims 20 which now claim 24 is interrupted base on merits as it dependent on claim 23 instead of claim 20.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3-5, 13-20, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockdale (U.S. 6,575,833) in view of Muir (U.S. 5,923,249).

Regarding **Claim 1 and 7**, Stockdale teaches a machine comprises:

a housing (main cabinet 4) (figure 1 and 2 and column 6, lines 17-23);

a switch 202 connected to the door and the housing (figure 2);

a door mounted to the housing for gaining access to the inside of the housing (figure 1 and 2 and column 6, lines 17-23);

a processor 312 for door detection (figure 3 and column 9, lines 62-67), and

a tamper detection mechanism (security monitoring system 322), wherein the tamper detection mechanism includes:

a tamper detection controller (Sensor Monitoring circuitry 400 and column 10, lines 54-67);

an emitter (figure 4 and column 11, lines 10-20); and

a sensor (figure 4 and column 11, lines 10-20),

wherein one of the emitter and sensor is mounted to the housing and one of the emitter and sensor is mounted to the door (column 7, lines 44-67 and column 8, lines 1-2); and

wherein the tamper detection controller drives the emitter with a signal and monitors the sensor to determine if it generated an inverted version of the signal (figure 4 and column 4, lines 5-11 and column 11, line 67 and column 12, lines 1-12).

It fails to show the switch is coupling with tamper detection mechanism and operates in conjunction with the switch to notify the processor that the door was open and generate an alarm.

Muir shows door monitoring system comprising one or more door open detection devices and first and second monitoring systems each connected to each of the one or more detection devices wherein the main door requires both mechanical and optical detections with their associated processor 104 to monitor if the doors are open (column 1, lines 17-25 and column 2, lines 22-25 and column 3, lines 8-10).

Further, it stated that the mechanical switch would associate with the main door of the machine as an existing door detection mechanism (first monitoring system) while optical and/or mechanical sensor could be a sub-system (second monitoring system) in coupling with mechanical switch for additional tamper detection (column 2, lines 55-67 and column 3, lines 34-35).

It would have been obvious to one of ordinary skill in the art to modify Stockdale's door switch as part of the tamper detection mechanism and combine with its optical tamper sensing for alarm condition as the combination of mechanical and

optical tamper detection taught by Muir because it would provide a additional detection for the system to prevent the theft to hack or vanquish the detection system by using light source to copy and emit the optical sensing element or mechanically overcome the door switch mechanism.

As to **claim 3**, Stockdale teaches the emitter is mounted to a portion of a door interlock mechanism (206 and 202) (column 4, lines 5-11 and column 8, lines 1-2) and wherein the switch 202 is part of the door interlock mechanism (figure 2 and column 7, lines 46-48).

As to **claim 4**, it teaches the sensor is mounted to a portion of a door interlock mechanism (206 and 202) (figure 2 and column 4, lines 5-11 and column 8, lines 1-2) and wherein the switch 202 is part of the door interlock mechanism (figure 2 and column 7, lines 46-48).

As to **claim 5**, Stockdale teaches the sensor and emitter operate to generate an inverted signal and wherein the tamper detection controller (322, 400) generates an alarm if the signal received from the sensor is not inverted (figure 3,4,5 and column 4, lines 5-11 and column 11, line 67 and column 12, lines 1-12).

It fails to show the tamper detection controller generates an alarm through its connection to the switch.

However, the combination of the mechanical and optical detection for door tampering as stated in rejection of claim 1 shows the tamper controller generates an alarm through its connection to the switch 202.

As to **claim 8**, Stockdale teaches he emitter is mounted to a portion of the door interlock mechanism (column 7, lines 44-57).

As to **claim 9**, Stockdale teaches the sensor is mounted to a portion of the door interlock mechanism (column 7, lines 44-57).

As to **claim 10**, Stockdale teaches the sensor and emitter operate to generate an inverted signal and wherein the tamper detection controller generates an alarm if the signal received from the sensor is not inverted (figure 4 and column 4, lines 5-11 and column 11, line 67 and column 12, lines 1-12).

As to **claim 11**, Stockdale teaches the tamper detection controller is mounted physically separate from the gaming mechanism (figure 2 and column 8, lines 37-65).

Regarding **claims 17, 20 and 26**, they are a method claim corresponds to the apparatus of claims 1 and 7, and they are therefore rejected for the similar reasons set forth in the rejection of claims 1 and 7, supra.

As to **claim 18**, the combination teaches connecting a tamper detection controller 400 to an existing tamper detection mechanism 202 includes running an existing gaming machine signal through the tamper detection controller (column 8, lines 39-65) as states in rejection of claim 1.

As to **claim 19**, it teaches the method comprises generating an alarm if the existing gaming machine signal is not detected (column 8, lines 39-65).

As to **claim 25**, it teaches the object is a door (column 6, lines 17-30).

As to **claims 27-28**, drawn to an apparatus corresponding to the apparatus of claims 18-19, is rejected for similar reasons set forth in the rejection of claims 18-19, supra.

As to **claim 29**, Stockdale teaches modifying includes inverting the signal (see rejection of claim 1).

7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockdale (U.S. 6,575,833) in view of Muir (U.S. 5,923,249), in further view of Stillwagon (U.S. 6,496,101).

As to **claim 2**, Stockdale's device meets all the limitation of claim except it fails to show the tamper detection controller is mounted physically separate from the processor.

Stillwagon's device teaches the electronic lock control system is mounted physically separate from the processor (figure 2 and 15 and column 6, lines 19-46).

It would have been obvious to one of ordinary skill in the art at the time to separate the processor from the controller because it would provide an easy access option for replacement without replace the entire unit.

As to **claim 6**, Stockdale's device meets all the limitation of claim except it fails to show the tamper detection mechanism includes a relay connected to the switch.

Stillwagon's device teaches a relay with actuator which is connected to the mechanical switch 31 (figure 2 and column 6, lines 20-46).

It would have been obvious to one of ordinary skill in the art to implement a relay with actuator of Stillwagon with the tamper detection system taught by Stockdale

because it would provide a switching and triggering element to interface different electronic components to corporate as a whole unit.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stockdale (U.S. 6,575,833) in view of Muir (U.S. 5,923,249), in further view of Chang (U.S. 4,833,448).

As to **claim 12**, the combination teaches the use of mechanical switch as part of the tampering detection system as states in rejection of claim 1, except it fails to show the tamper detection mechanism includes a relay connected to the door interlock mechanism, wherein the relay activates the door open alarm.

Chang shows a relay connected to the door interlock mechanism, wherein the relay activates the door open alarm (column 1, lines 60-68).

It would have been obvious to one of ordinary skill in the art to implement a relay as taught by Chang for alarm activation in response of the condition of the door in combination with the tamper detection system taught by Stockdale because it would provide a switching and triggering element to interface different electronic components to corporate as a whole unit and alarm condition for door opening detection.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stockdale (U.S. 6,575,833) in view of Muir (U.S. 5,923,249), in further view of Hama et al. (U.S. 6,239,423).

As to **claim 21**, Stockdale's device meets all the limitation of claim except it fails to show a LED as an indicator, which is used to indicate that the emitter and sensor are aligned properly.

Hama teaches to use light indicator to align the emitter and sensor for positioning (figure 2 and column 7, lines 45-55).

It would have been obvious to one of ordinary skill in the art the use of LED as a light indicator is a well-known method because LED provide the same and alternative light as other light source for alert.

It would have been obvious to one of ordinary skill in the art to include a LED indicator into Stockdale's optical detection system because it would help the user to align and calibrate both emitter and sensor during installation.

10. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stockdale (U.S. 6,575,833) in view of Muir (U.S. 5,923,249), in further view of Carmichael (U.S. 20020100659).

As to **claim 23 and 24**, Stockdale's device meets all the limitation of claim except it fails to show the object is peripheral where peripheral is a hopper.

Carmichael's device teaches a kit with emitter and sensor is for detecting a hopper (abstract and page 2, paragraphs 14,16, 33 and 38).

It would have been obvious to one of ordinary skill in the art the detecting object would be peripheral or hopper because it would provide the collectable data such as coin for the system to avoid a cheating tool would be inserted.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoi C. Lau whose telephone number is (571)272-8547. The examiner can normally be reached on M- F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571)272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoi Ching Lau
Art Unit 2612